

DIRECT TESTIMONY OF

THERESE A. GRIFFIN

ON BEHALF OF

DOMINION ENERGY SOUTH CAROLINA, INC.

DOCKET NO. 2019-226-E

Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND POSITION.

A. My name is Therese A. Griffin, and my business address is 220 Operation Way, Cayce, South Carolina. I am the Manager of Energy Efficiency and Demand Management for Dominion Energy South Carolina, Inc. (“DESC” or the “Company”).¹

Q. DESCRIBE YOUR EDUCATIONAL BACKGROUND AND BUSINESS EXPERIENCE.

A. I have a bachelor’s degree in journalism from the University of South Carolina. I began working for the Company in 1994 as a communications strategist and have worked in various roles since then managing marketing and corporate communications, advertising, online communications,

¹ South Carolina Electric & Gas Company (“SCE&G”) changed its name to Dominion Energy South Carolina in April 2019, as a result of the acquisition of SCANA Corporation by Dominion Energy, Inc. For consistency, I use “DESC” to refer to the Company both before and after this name change.

1 corporate design and printing services functional areas. I have also been
2 responsible for philanthropy, which included identifying strategic
3 opportunities to partner with nonprofit organizations for Company grants and
4 employee volunteer opportunities. In 2013, I joined the Company's newly
5 formed renewable energy department. In 2014, I assumed responsibility as
6 Manager of Energy Efficiency and Demand Management.

7 **Q. WHAT ARE YOUR DUTIES WITH DESC?**

8 A. Currently, as Manager of Energy Efficiency and Demand
9 Management, I lead planning and implementation of the Company's
10 residential, commercial and industrial demand-side management ("DSM"),
11 and energy efficiency ("EE") programs. I am also responsible for integrating
12 the Company's energy efficiency efforts with its renewable energy programs
13 and customer assistance department.

14 **Q. ARE YOU A MEMBER OF ANY PROFESSIONAL**
15 **ORGANIZATIONS?**

16 A. Yes. I currently serve on the board of directors of the Southeast
17 Energy Efficiency Alliance ("SEEA"). SEEA promotes energy efficiency as
18 a catalyst for economic growth, workforce development and energy security
19 across the Southeast. I am also a member of the Association of Energy
20 Services Professionals, the American Association of Blacks in Energy, and

1 have lifetime membership with the International Association of Business
2 Communicators, where I served as president of the South Carolina Chapter
3 and a regional board member.

4 **Q. HAVE YOU EVER TESTIFIED BEFORE THIS COMMISSION?**

5 A. Yes. I have testified once before the Public Service Commission of
6 South Carolina (the “Commission”).

7 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

8 A. My testimony provides an overview of DESC’s current suite of DSM
9 programs and the customer energy efficiency measures and demand response
10 (“DR”) measures from those programs that were considered in formulating
11 the integrated resource plan (“IRP”) that the Commission is reviewing for
12 statutory compliance in this docket. I discuss the history of those programs
13 and the results achieved under them. I will also update the Commission on
14 the changes in those programs since their approval in 2019, including
15 changes related to the COVID-19 pandemic. Specifically, my testimony
16 discusses the DSM programmatic inputs used to meet the statutory
17 requirement that an IRP is to include consideration of energy efficiency and
18 demand management programs as set forth in S.C. Code Ann. §§ 58-37-
19 40(B)(1)(e)(i) and 58-37-40(B)(1)(i).

20

**THE HISTORY AND STRUCTURE OF DESC'S CURRENT DSM
PROGRAMS**

**Q. WHAT IS THE HISTORY OF THE CURRENT SUITE OF DSM
PROGRAMS LISTED IN DESC'S 2020 IRP?**

A. In 2008, DESC retained ICF Resources, LLC ("ICF") to design a suite of DSM programs for the Company to offer to its customers. DESC chose ICF because of its expertise in designing and implementing DSM programs nationally. In fact, ICF has implemented more than 170 DSM programs for 42 utilities in 28 states. In Order No. 2010-472, the Commission approved an initial suite of programs designed by ICF and evaluated for cost-effectiveness through a DSM potential study prepared and submitted to the Commission, the South Carolina Office of Regulatory Staff ("ORS"), and interested parties. The Commission also established an Energy Efficiency Advisory Group ("Advisory Group") to meet at least twice a year to review the status of DSM programs and their implementation. The Advisory Group has been carried forward in subsequent orders. Among its other duties, the Advisory Group reviews the annual Evaluation, Measurement and Verification ("EM&V") reports that objectively measure the costs and savings generated by DESC's programs as implemented. Nine EM&V studies have been submitted to ORS, the Commission and the stakeholders advisory group for review and comment since 2010. They are prepared by a

1 third-party contractor, Opinion Dynamics Corp. (“ODC”), which was retained
2 after consultation with ORS. ODC has conducted evaluations on hundreds of
3 DSM programs for dozens of utilities in more than 20 states. To perform
4 their evaluations, ODC verifies the actual DSM savings achieved by
5 customers through field studies and on-site verification, review of DESC’s
6 programs and records, and other data collected directly from customers.

7 **Q. WHO ARE THE MEMBERS OF THE ADVISORY GROUP?**

8 A. The current Members of the Advisory Group are:

- 9 • ORS – representing all customers and the public interest
- 10 • State Energy Office of ORS – representing the state and public
- 11 interest
- 12 • South Carolina Office of Economic Opportunity – representing the
- 13 low-income interest
- 14 • South Carolina Community Action Partnership – representing the
- 15 low-income interests
- 16 • South Carolina Energy Users Committee – representing the
- 17 industrial sector
- 18 • South Carolina Small Business Chamber of Commerce –
- 19 representing the commercial sector
- 20 • South Carolina Coastal Conservation League (“SCCCL”) –
- 21 representing environmental interests
- 22 • Southern Alliance for Clean Energy (“SACE”) – representing
- 23 environmental interests.
- 24

25 **Q. HAS THE SUITE OF DSM PROGRAMS APPROVED IN 2010 BEEN**
26 **REVIEWED AND MODIFIED IN SUBSEQUENT PROCEEDINGS?**

27 A. Yes. In 2013 and 2019, DESC initiated comprehensive reviews of its
28 DSM programs. Based on updates to program inputs in 2013 and the DSM

1 potential study in 2019, revised programs were presented to the Commission.
2 Revised programs were approved in 2013 and 2019.

3 **Q. BY WHAT COMMISSION ORDER WERE DESC'S CURRENT DSM**
4 **PROGRAMS APPROVED?**

5 A. The DSM programs that are considered in the 2020 IRP are DESC's
6 current DSM programs as approved in Order No. 2019-880. They are being
7 implemented or are in development today. The Commission issued the order
8 approving DESC's current DSM programs on December 20, 2019, only two
9 months before the 2020 IRP was filed in this case.

10 **Q. HOW WERE THE DSM PROGRAMS APPROVED IN 2019**
11 **PREPARED, IDENTIFIED, AND EVALUATED FOR COST-**
12 **EFFECTIVENESS AND PRACTICALITY?**

13 A. The programs that were approved by Order No. 2019-880 were based
14 on a potential study prepared by ICF entitled the *Dominion Energy South*
15 *Carolina: 2020–2029 Achievable DSM Potential and PY10–PY14 Program*
16 *Plan* (the “2019 Potential Study”), which determined the DSM programs to
17 be practical for implementation and cost-effective. The evaluation of cost-
18 effectiveness is as required by the DSM statute (S.C. Code Ann. § 58-37-
19 200) which allows the implementation of DSM programs that are shown to
20 be “cost-effective.”

1 Pursuant to Order No. 2019-880, DESC agreed to update the analysis
2 of its DSM programs based on new avoided cost calculations or
3 methodologies that were approved in Docket No. 2019-184-E. That update
4 will be filed in July 2020. DESC does not anticipate any major program
5 shifts, but does expect some additional measures to become cost effective.

6 **Q. HOW WAS THE POTENTIAL STUDY PREPARED?**

7 A. In preparing the 2019 Potential Study, ICF assessed the cost-
8 effectiveness as well as the practicality of more than 10,000 individual
9 energy efficiency measures. ICF evaluated cost-effectiveness using standard
10 methodologies that are widely accepted in the industry as the appropriate
11 methodologies for assessing the cost-effectiveness of DSM programs. The
12 principal evaluation tool ICF used was the total resource cost (“TRC”) test.
13 This test determines whether the value of energy and demand savings from
14 a measure or group of measures justify the cost of the measure to customers
15 and the utility. The TRC test is widely accepted throughout the industry as
16 the appropriate measure for determining cost-effectiveness for DSM
17 programs.

18 The ICF cost-effectiveness evaluation considered the history of DSM
19 programs in DESC’s service territory, customer responses and the actual
20 savings achieved. Actual results and penetration rates for specific programs

1 or measures were available and evaluated based on the seven EM&V studies
2 that had been conducted at the time the study was underway.

3 It is well recognized in the DSM industry that programs which are
4 successful in some jurisdictions may not be successful in other jurisdictions.
5 In the 2019 Potential Study, ICF took into account detailed information
6 specific to DESC's service territory, including customer demographics,
7 housing stock, the characteristics of the energy-using equipment in place in
8 homes and businesses, the age and likely turnover rate of that equipment, and
9 the barriers and drivers to customer investment in energy efficient
10 equipment. Data was collected on residential and commercial customers
11 from existing DESC data sources, such as program tracking databases, DESC
12 comprehensive home audit data, and the DESC service area Residential
13 General Population Study. Additional primary data was collected via nearly
14 400 residential telephone surveys, 157 residential on-site visits, 310
15 commercial telephone surveys, 45 commercial on-site interviews and two
16 workshops with trade allies and market actors, including contractors and
17 distributors. In sum, the data specific to DESC's territory was combined with
18 ICF's extensive knowledge of DSM programs being implemented by utilities
19 nationwide as indicated above.

1 **Q. WHAT ROLE DID TRADE ALLIES PLAY IN ASSESSING THE**
2 **PRACTICALITY OF PROGRAMS AND MEASURES?**

3 A. In many cases, trade allies are a direct link to the customer, and have
4 in-depth knowledge of the sorts of programs that will meet customers' needs
5 and generate acceptable levels of participation in DESC's territory.
6 Furthermore, the willingness of trade allies to promote certain programs is
7 critical to their success. Heating, ventilation and air conditioning ("HVAC")
8 contractors, lighting contractors and distributors, plumbers and other trade
9 allies represent an important source of information about customers'
10 likelihood to participate in specific programs and at specific incentive levels
11 as well as the practicality of program design and the likelihood specific
12 programs and measures can be effectively promoted to customers. DESC
13 maintains an ongoing program of outreach to its trade allies. The 2019
14 Potential Study took information from trade allies into account in assessing
15 the practicality and likely penetration rates of specific programs and
16 measures in DESC's territory.

17 **Q. WHAT WAS THE RESULT OF THE 2019 POTENTIAL STUDY?**

18 A. Based on the 2019 Potential Study, DESC proposed a suite of new,
19 modified, and expanded DSM programs that effectively doubled DESC's
20 planned DSM program spending. The proposed programs were calculated to

1 increase the DSM-related reduction in DESC's annual energy sales by
2 approximately 47%, from the rate of a 0.33%, forecasted under the prior suite
3 of DSM programs, to an annual reduction of 0.7%. These figures are
4 calculated net of DESC's opt-out customers, which is comprised of 438
5 commercial and industrial customers and represents 23% of the load of the
6 commercial and industrial classes.

7 The programs proposed in the 2019 Potential Study were cost-
8 effective as measured against the TRC test both collectively and individually.
9 All of the programs had a TRC score of at least 1.0 which is the breakeven
10 level for cost-effectiveness. The Commission approved the proposed suite of
11 DSM programs with certain modifications in Order No. 2019-880, dated
12 December 20, 2019.

13 **Q. DID DESC CONSULT THE ADVISORY GROUP IN SCOPING THE**
14 **2019 POTENTIAL STUDY AND REVIEWING ITS INITIAL**
15 **FINDINGS?**

16 A. Yes, ODC performed the market study and survey work used by ICF
17 in the 2019 Potential Study. Prior to beginning its work, ODC met with the
18 Advisory Group to discuss scoping and methodology. ICF then met with the
19 Advisory Group to discuss the plan, methodology and approach to be used
20 in the study before it began its evaluation and screening of measures and

1 programs. ICF later met with the Advisory Group to present the key
2 conclusions of the study and the measures and programs to be proposed prior
3 to the finalization of the study. Input from the Advisory Group was
4 specifically solicited as to additional measures to consider and evaluate and
5 some of the measures ultimately presented were first suggested by the
6 Advisory Group.

7 **Q. HAVE DESC'S DSM PROGRAMS TO DATE BEEN SUCCESSFUL?**

8 A. Yes, since 2010, DESC's DSM programs have engaged more than
9 155,000 customers, including 14,663 low-income customers and 8,400
10 business customers. These customer counts do not include the purchasers of
11 high efficiency bulbs sold through retail stores at incentivized prices. All
12 told, approximately 7.8 million high efficiency light bulbs have been
13 provided or installed. Incentives have been provided for the installation of
14 over 54,000 high efficiency heat pumps, central air conditioning units, water
15 heaters and/or duct work improvements and replacements. More than 25,000
16 Home Energy Check-ups were completed, and more than 13,300
17 refrigerators and freezers were removed from the grid through the Appliance
18 Recycling program.

19 **Q. HOW DO INCREASING EFFICIENCY STANDARDS FOR**
20 **LIGHTING, APPLIANCES, AND NEW CONSTRUCTION IMPACT**

1 **THE OPPORTUNITY TO ACHIEVE ADDITIONAL SAVINGS**
2 **THROUGH DSM PROGRAMS?**

3 A. Federal lighting and appliance efficiency standards are far higher than
4 in the past and there are fewer and older, less efficient lights that remain to
5 be replaced. The same is true for appliances and HVAC equipment. A large
6 percentage of the older and highly inefficient units have been replaced.
7 Therefore, efficiency gains are more incremental. There are fewer
8 opportunities for DSM programs to generate dramatic efficiency gains
9 through appliance and lighting replacement programs that can be mass-
10 marketed. Similarly, building codes are more stringent than in the past. This
11 means that a great deal of energy efficiency is automatically being designed
12 into construction.

13 In response, DSM plans have been modified to reflect higher
14 efficiency baselines and will focus on a narrower set of cost-effective
15 measures. The incremental costs involved in exceeding already high
16 efficiency standards is typically higher than when standards were lower and
17 the gains are less. While there are many uncertainties about predicting future
18 conditions, all indications are that as time progresses it will be increasingly
19 difficult for DSM programs to achieve additional incremental reductions in

1 load growth over and above those generated by increased efficiency
2 standards in the economy generally.

3 **Q. WHAT IS THE STATUS OF THE IMPLEMENTATION OF THE**
4 **SUITE OF PROGRAMS APPROVED IN 2019?**

5 A. DESC began work to implement the suite of programs approved in
6 Order No. 2019-880 even before that order was finalized. The rollout of the
7 new DSM programs was ongoing during the time that the 2020 IRP was
8 being finalized. The public health crisis caused by the COVID-19 pandemic
9 soon followed. This public health crisis has required DESC to suspend DSM
10 programs which involve direct contact with customers in their homes or
11 businesses. Going forward, it is not clear the degree to which customers will
12 be receptive to in-home and on-site visits under the new public health
13 conditions. Likewise, the long-term effects of the COVID-19 pandemic on
14 customers' willingness to participate and ability to invest in DSM programs
15 remains to be seen. As a result, modifications to these programs may be
16 required.

17 **Q. WHAT DID ORDER NO. 2019-880 MANDATE TO PROVIDE**
18 **CONSISTENCY AND STABILITY FOR THE IMPLEMENTATION**
19 **OF CURRENT DSM PROGRAMS?**

1 A. In Order No. 2019-880, the Commission approved DESC's proposed
2 suite of DSM programs with certain modifications and expansions. To
3 provide for consistency and stability in the implementation of the new DSM
4 programs, the Commission specifically ordered that the approved DSM
5 programs would not be subject to changes based on regulatory challenges for
6 the five-year period ending in 2024. In this case, the five-year term is
7 consistent with the DSM planning horizon under which the programs have
8 been formulated and their ability to provide benefits to customers has been
9 measured. An effective and efficient DSM program requires stability and
10 the Commission properly granted that in Order No. 2019-880.

11 **Q. PLEASE DESCRIBE THE DSM PROGRAMS THAT ARE**
12 **CONSIDERED IN THE 2020 IRP.**

13 A. The Company's current portfolio consists of a large number of energy
14 efficiency measures grouped under seven residential and three commercial
15 and industrial DSM programs:² The new programs, new measures and
16 program expansions are in various stages of implementation at this time.

17 **Residential Programs**

- 18 • Residential Neighborhood Energy Efficiency
19 • Residential Multifamily

² The programs identified in this testimony are identified by descriptive functional names. For marketing purposes, however, these programs may be identified by different names when the programs are rolled out to DESC's customers.

- Residential Appliance Recycling
- Residential Heating & Cooling
- Residential Home Energy Check-Up (Tier 1 & Tier 2)
- Residential Home Energy Reports
- Residential EnergyWise Savings Store (Online Store)

Commercial and Industrial Programs

- Commercial Small Business Direct Install
- Commercial and Industrial EnergyWise for Your Business
- Municipal LED Lighting

Q. PLEASE DESCRIBE THE RESIDENTIAL NEIGHBORHOOD ENERGY EFFICIENCY PROGRAM.

A. The Residential Neighborhood Energy Efficiency program (“NEEP”) provides customers in low to moderate income neighborhoods with energy efficiency education and direct installation of multiple low-cost energy conservation measures as part of neighborhood door-to-door sweeps to reach customers. A neighborhood sweep (which, in some cases, may involve a small town or rural community) begins with a kickoff event at a local church, school, or public facility. The event is well-publicized in advance. Additionally, local elected officials and community leaders are invited to participate in the kickoff event. Their endorsement of the program is critically important to customer participation in it.

At the kickoff, customers may make appointments for energy visits, and specific dates are announced for the sweep. Door hangers and other print

1 collateral are distributed within the neighborhood confirming the dates. On
2 the designated days, energy consultants go door-to-door offering eligible
3 customers the direct installation of light-emitting diode (“LEDs”) bulbs,
4 HVAC filters, low-flow kitchen faucet aerators, advanced power strips, and
5 water heater blankets, as well as water heater turn down and other appropriate
6 measures. For targeted mobile home customers, additional weatherization
7 measures may include air sealing, thermostat upgrade, duct sealing,
8 reflective roof coating and belly board insulation specific to this housing
9 type. These measures are all provided at no cost to the customers. Typically,
10 sweeps are made until 70% of eligible customers have been reached or until
11 three sweeps of the neighborhood have been conducted. Door hangers are
12 left for absent residents indicating the date of a follow up sweep. The NEEP
13 Program also offers specific measures for mobile and manufactured homes
14 that can benefit from energy efficiency upgrades.

15 Through Program Year (“PY”) 9, nearly 14,700 homes have
16 participated in NEEP, saving customers 15,878 megawatt hours (“MWh”) of
17 energy usage, with \$5.8 million invested in the program. Customer benefits
18 in the form of energy savings have been, on average, 1,100 kilowatt hours
19 (“kWh”) per participating customer per year, with installation measures
20 valued, on average, at \$400. For mobile home customers, customer benefits

1 in the form of energy savings have been, on average, 1,880 kWh per year,
2 with installation measures valued, on average, at \$3,000. As proposed in the
3 2019 Potential Study, and as directed in Order No. 2019-880, DESC is
4 targeting an increase of 45% in the participation rate of this program.

5 **Q. PLEASE DESCRIBE THE RESIDENTIAL MULTIFAMILY**
6 **PROGRAM.**

7 A. About 20% of DESC's customers are rental customers living in
8 multifamily housing, and approximately 30% of these customers are
9 considered low-income customers. Experience has shown renters to be a
10 difficult customer group to reach since often the person paying the utility bill
11 is not the owner or manager of the residence.

12 The Residential Multifamily program seeks to align property owners
13 and managers with tenants in a single program. It does so by offering highly
14 discounted energy efficiency upgrades to property owners in exchange for
15 building-wide participation by tenants in the program. Building owners and
16 managers receive incentives of up to 75% of the cost for qualifying high-
17 efficiency common area lighting and HVAC upgrades. Additionally, tenants
18 receive an energy consultation and appropriate measures which may include
19 direct install of LED bulbs and low-flow kitchen faucet aerators and

1 showerheads at no cost. The program anticipates over 9,000 tenant visits and
2 over 1,800 common area measures will be installed in the next five years.

3 **Q. PLEASE DESCRIBE THE RESIDENTIAL APPLIANCE**
4 **RECYCLING PROGRAM.**

5 A. The Residential Appliance Recycling program retires older, less
6 efficient but still operable secondary refrigerators, and/or stand-alone
7 freezers from service. DESC collects and recycles these appliances at no
8 charge while providing direct payments to customers of \$50 for a qualifying
9 refrigerator or freezer. Through PY9, over 13,300 units have been collected,
10 saving approximately 8,971 MWh of energy. As proposed in the 2019
11 Potential Study and adopted in Order No. 2019-880, the program is in the
12 process of increasing participation through additional marketing and
13 promotional events.

14 **Q. PLEASE DESCRIBE THE RESIDENTIAL HEATING & COOLING**
15 **PROGRAM.**

16 A. The Residential Heating & Cooling program provides incentives for
17 customers to invest in high-efficiency heating and cooling equipment in
18 existing homes and to improve the energy efficiency through duct insulation,
19 duct sealing and duct improvements. As proposed in the 2019 Potential
20 Study and adopted in Order No. 2019-880, the program will provide

1 incentives for heat pump water heaters and for replacing electric resistant
2 heat with a heat pump. Over the next five years, the program is forecasted
3 to provide incentives to customer for over 28,000 additional heating and
4 cooling units and/or duct system improvements.

5 **Q. PLEASE DESCRIBE THE RESIDENTIAL HOME ENERGY**
6 **CHECK-UP PROGRAM.**

7 A. Under the Residential Home Energy Check-up program, DESC's
8 energy experts schedule visits to the residences where they conduct a visual
9 energy efficiency inspection and review with the customers up to two years
10 of their consumption data and weather impacts. The experts identify likely
11 sources of high energy use and provide customers with a list of various low-
12 and no-cost energy saving recommendations and tips (e.g., thermostat
13 settings, caulking/weather-stripping around doors and windows, changing air
14 filters, or adjusting water heater settings). At the completion of the visit,
15 customers are offered an energy efficiency kit containing energy efficient
16 bulbs, water heater wraps and/or pipe insulation. Through PY9, the program
17 has been successful in encouraging over 25,200 homeowners and renters to
18 undertake assessments of energy consumption at their residence and has
19 resulted in an average annual energy savings of 580 kWh per participating
20 customer.

1 In 2020, the program was expanded to provide the following list of
2 incentives. Tier 2 measures are offered through independent contractors
3 following the customers' completion of Tier 1 measures.

4 • Tier 1 Measures

- 5 ○ Home consultation – 100% of cost
- 6 ○ LED bulbs – 100% of cost
- 7 ○ Low-flow kitchen faucet aerators – 100% of cost
- 8 ○ Water heater wrap – 100% of cost
- 9 ○ Pipe insulation – 100% of cost
- 10 ○ Low-flow showerheads – 100% of cost (new measure)

11 • Tier 2 Measures

- 13 ○ Air sealing – Up to 75% of cost
- 14 ○ Home insulation – Up to 75% of cost
- 15 ○ Miscellaneous home shell measures – Up to 75% of cost

16
17 **Q. PLEASE DESCRIBE THE RESIDENTIAL HOME ENERGY**
18 **REPORTS PROGRAM.**

19 A. The Residential Home Energy Reports program motivates customers
20 to improve their energy efficiency by providing them with advanced
21 benchmarking, educational resources and follow up reminders. The reports
22 provided under the program compare a customer's energy usage against a
23 peer group of similar homes. The reports also compare a customer's current
24 usage to the customer's historic usage and provide recommendations on how
25 to improve energy efficiency. To further increase engagement, customers

1 have access to a portal that provides a deeper dive into energy efficiency
2 measures that could apply to their home.

3 More than 37,000 residential customers have opted in to receive
4 monthly/bimonthly energy reports through this program, resulting in an
5 average annual savings of 210 kWh per customer, or 68,700 MWh of energy
6 saved in total since the inception of the program. The program is currently
7 being expanded from an opt-in model, under which the customers must
8 affirmatively choose to participate, to an opt-out model. Under the opt out
9 model, customers with the highest energy usage and greatest opportunity to
10 save will be enrolled in the program unless they choose to opt out. By the
11 end of PY14, it is estimated that over 277,000 customers will be participating
12 in the newly designed program.

13 **Q. PLEASE DESCRIBE THE RESIDENTIAL ENERGYWISE SAVINGS**
14 **STORE (ONLINE STORE).**

15 A. The Residential EnergyWise Savings Store (Online Store)
16 incentivizes the purchase of discounted home energy efficiency products for
17 residential customers. Products ordered from the store must be shipped to a
18 valid customer address within the DESC service territory. The list of
19 qualifying equipment and per unit incentives are:

- 20 • LED bulbs (standard) – Up to \$3
- 21 • LED bulbs (specialty) – Up to \$6

- LED bulbs (connected) – Up to \$10
- Low-flow kitchen faucet aerators – Up to \$5
- Low-flow showerheads – Up to \$10
- Advanced power strips – Up to \$20
- Smart thermostats – Up to \$75 (new measure)

Since 2015, through both online and other channels, over 762,000 home energy efficiency products have been sold or distributed resulting in 42,862 MWh in energy savings.

Q. PLEASE DESCRIBE THE COMMERCIAL SMALL BUSINESS DIRECT INSTALL PROGRAM.

A. Under the Commercial Small Business Direct Install program, customers receive a free on-site energy analysis by a trained energy efficiency auditor. If replacement of inefficient or outdated lighting or refrigeration equipment is indicated, the customer is offered direct installation of new, high efficiency equipment by subcontractors with incentives equal to 80% of the cost qualifying lighting or refrigeration replacement up to \$6,000. Over 2,600 projects have received incentives, with an average incentive of approximately \$3,000 per customer. The incentives provided to date have exceeded \$7.5 million and have saved customers 24,799 MWh of energy consumption. DESC is currently expanding the program to focus more intensively on small businesses located in rural areas and small towns. Beginning in 2020, DESC is increasing incentives available

1 under this program and is funding an effort to expand participation by
2 approximately 75% over five years. Our plan is to incentivize 4,000
3 additional commercial business projects over the next five years.

4 **Q. PLEASE DESCRIBE THE COMMERCIAL AND INDUSTRIAL**
5 **ENERGYWISE FOR YOUR BUSINESS PROGRAM.**

6 A. The Commercial and Industrial EnergyWise for Your Business
7 program is divided into a prescriptive path, which provides incentives for
8 specific equipment upgrades, and a custom path, which ties incentives to the
9 specific incremental efficiency benefits of the customer's proposed plan and
10 allows customers the ability to create "custom" rebates to fit their individual
11 needs. Both paths provide energy efficiency consulting. Over 5,800 projects
12 have received incentives, which exceed \$31 million and have saved
13 customers 242,341 MWh of energy consumption.

14 As of 2020, DESC will be adding a new agricultural component to the
15 prescriptive path of the program. This new component provides targeted
16 incentives to agricultural customers such as dairy, poultry and swine farms
17 by providing lighting, pumping, ventilation, irrigation and other energy
18 efficiency measures specific to their business.

19 As of 2020, DESC will be adding a Strategic Energy Management
20 component to this program for more modestly-sized commercial and

1 industrial customers. These mid-market industrial and commercial customers
2 often lack dedicated energy managers, which makes it difficult for them to
3 take advantage of the programs that are available. Under the new program,
4 facility managers are trained in energy management through a year-long
5 series of workshops and one-on-one coaching so that they can identify and
6 implement significant energy and cost savings in their businesses.

7 **Q. PLEASE DESCRIBE THE MUNICIPAL LED LIGHTING**
8 **PROGRAM.**

9 A. As of 2020, DESC is offering municipalities incentives via bill credits
10 to encourage them to replace older, inefficient streetlights with high-
11 efficiency LED streetlights. The incentives are set at the level necessary to
12 offset the cost of switching High Intensity Discharge (“HID”) lighting to
13 more efficient LED lighting. The program targets replacing approximately
14 54,000 non-LED fixtures over the next 3 - 5 years.

15 **Q. WHAT DEMAND REDUCTION MEASURES ARE BEING**
16 **OFFERED?**

17 A. DESC currently offers a number of demand reduction measures that
18 are tariff based, including time of use (“TOU”) tariffs, standby generation
19 tariffs and interruptible tariffs. In addition, the 2019 Potential Study
20 evaluated the cost effectiveness of additional demand reduction measures to

1 offset winter peaks. The study looked at additional TOU programs, Critical
2 Peak Pricing and direct load control for HVAC and water heaters. The 2019
3 Potential Study showed that none of these additional demand reduction
4 measures could be cost-effective until advanced metering infrastructure
5 (“AMI”) was rolled out in sufficient numbers across DESC’s system. In
6 Order No. 2019-880, the Commission agreed that when sufficient saturation
7 of AMI is in place, DESC should propose additional demand reduction
8 programs to provide rate-related incentives for customers to shift
9 consumption off-peak. The 2019 Potential Study determined that, by winter
10 2029, 43 megawatts (“MW”) of demand reduction could be achieved. This
11 43 MW of demand reduction has been modeled in the medium and high DSM
12 scenarios presented in the 2020 IRP.

13 **Q. PLEASE SUMMARIZE YOUR CONCLUSIONS REGARDING THE**
14 **DSM PROGRAMS LISTED HERE.**

15 A. The DSM programs considered in the IRP are the DSM programs
16 which have been recently approved by the Commission. Through the 2019
17 Potential Study and the testimony presented in support of it, these programs
18 have been shown to represent a balanced suite of DSM programs that are
19 reasonably practicable for the Company to implement; are likely to be well
20 received by customers; are cost-effective and economically justified; and have

1 a reasonable likelihood of providing significant net savings to customers and
2 the system. At the time of this proceeding, new programs and measures are in
3 the early stages of implementation. The 2020 IRP study properly considers
4 these programs and the low savings they represent to constitute a proper basis
5 measuring the sensitivity of IRP to future energy efficiency and demand
6 reduction impacts.

7 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

8 A. Yes, it does.